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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/844,849	04/30/2001	Kathleen M. Moriarty	64860/RSM/KJB	2748

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New York, NY 10036

EXAMINER

PHILLIPS, HASSAN A

ART UNIT	PAPER NUMBER
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2151

DATE MAILED: 02/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/844,849	MORIARTY, KATHLEEN M.	
	Examiner	Art Unit	
	Hassan Phillips	2151	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 December 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-10 and 12-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-10 and 12-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This action is in response to amendments filed on December 13, 2004.

Drawings

2. After consideration of the amendments made to the drawings to replace reference character "56", used to designate "storage" in Fig. 5, with reference character "52", the Examiner has withdrawn the objections to the drawings.

Specification

3. After consideration of the specification to correct minor errors, the Examiner has withdrawn the objections to the specification.

Claim Objections

4. After consideration of the amendments made to claim 13, to correct minor errors, the Examiner has withdrawn the objection to claim 13.

Response to Arguments

5. Applicant's arguments filed December 13, 2004 have been fully considered but they are not persuasive. Applicant argued that:

- a) Lamberton fails to teach or suggest that the selected information includes "identification information that differs from identification information of the border device"
- b) Lamberton and Vange fail to show or suggest storing at least the selected information of the response for a predetermined period of time when the destination address of the information query is one of a plurality of predetermined addresses stored at the sender, such that when a subsequent information query includes a destination address corresponding to any of the plurality of predetermined addresses the stored selected information response is used without sending the subsequent information query to the recipient, wherein said predetermined period of time is different from a period of time for which the selected information of the response is stored when the destination address of the information query is an address other than one of the plurality of predetermined addresses as recited in claim 19.
- c) There is no suggestion to combine the Applicants Admitted Prior Art (AAPA) with Lamberton.

The Examiner respectfully disagrees.

Regarding item a), the Examiner has interpreted the Initial Sequence number (Receiver side) ISR 310 to be the identification information that differs from identification information of the border device 720. In the teachings of Lamberton the border device provides an ISR, with selected information, to a client. The ISR identifies the client that

is requesting a TCP connection in order to prevent SYN attacks. After being incremented by 1, the ISR is returned to the border device to establish a valid TCP connection. See page 3, paragraph 27.

In response to Applicant's argument that the ISR is not identification information as described in the subject specification, it is noted that such features upon which applicant relies are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Regarding item b), the Examiner has expressed in the previous action that the combination of Lamberton and Vange provide a means for storing at least the selected information of the response for a predetermined period of time when the destination address of the information query is one of a plurality of predetermined addresses stored at the sender, such that when a subsequent information query includes a destination address corresponding to any of the plurality of predetermined addresses the stored selected information response is used without sending the subsequent information query to the recipient, wherein said predetermined period of time is different from a period of time for which the selected information of the response is stored when the destination address of the information query is an address other than one of the plurality of predetermined addresses as recited in claim 19. More specifically, Lamberton teaches: generating an information query by the sender, sending the information query to the recipient (730), receiving the information query at a border device (720) of the recipient, processing the information query at the border device according to a plurality

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of predetermined rules, wherein the predetermined rules provide for one of: providing selected information requested by the information query in a response to be sent to the sender; discarding the information query; and passing the information query through the border device to the recipient for response, (page 2, paragraph 8, also see Fig. 7), and Vange teaches: using a cache to store IP address mapping information at client (117), (page 5, paragraph 54). Being that the utilization of caches were well known in the art at the time of the present invention it would have been obvious to one of ordinary skill in the art to modify the teachings of Lamberton to show the sender having a cache for storing at least a portion of the selected information sent from the border device to the sender, at the sender, for a predetermined period of time when a destination address of the information query corresponds to a predetermined group of addresses stored at the sender, and utilizing the stored selected information from the response whenever an information query is generated including any of the predetermined group of addresses stored at the sender. This would have facilitated communication between the sender and a recipient in the network by reducing the steps normally required for the sender to access the recipient in the network, Vange, page 5, paragraph 54.

Regarding item c), in response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir.

1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, as indicated by the Applicant, the knowledge generally available to one of ordinary skill in the art would have made it obvious to combine the performance metric packets with Lamberton.

Furthermore, the Examiner has interpreted the claim language as broadly as possible. It is also the Examiner's position that Applicant has not yet submitted claims drawn to limitations, which define the operation and apparatus of Applicant's disclosed invention in a manner that distinguishes over the prior art.

Failure for Applicant to significantly narrow definition/scope of the claims implies the Applicant intends broad interpretation be given to the claims. The Examiner has interpreted the claims with scope parallel to the Applicant in the response and reiterated the need for Applicant to define the claimed invention more clearly and distinctly. Accordingly the references supplied by the examiner in the previous office action covers the claimed limitations. The rejections are thus sustained. Applicant is requested to review the prior art of record for further consideration.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) The invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1, 5, 10, 12, 21, are rejected under 35 U.S.C. 102(e) as being anticipated by Lamberton et al. (hereinafter Lamberton), U.S. Patent Pub. No. 2001/0042200.

8. In considering claims 1 and 5, Lamberton teaches a method of gathering information about a connection between a sender and a recipient in a network comprising the steps of: generating an information query by the sender, sending the information query to the recipient (730), receiving the information query at a border device (720) of the recipient, processing the information query at the border device according to a plurality of predetermined rules, wherein the predetermined rules provide for one of: providing selected information requested by the information query in a response to be sent to the sender; discarding the information query; and passing the information query through the border device to the recipient for response, (page 2, paragraph 8, also see Fig. 7); the selected information provided to the sender including identification information (310) that is different than that of the border device, (page 2, paragraph 8, and Fig. 3).

9. In considering claim 10, Lamberton teaches a border device (720) positioned between a sender and a recipient for use in gathering information regarding a connection between the sender and the recipient in a network, the border device

comprising: a receiver for receiving an information query from the sender addressed to the recipient, a processor for processing the information query on behalf of the recipient to generate a response to the information query including selected information, and a transmitter for sending the response including the selected information to the sender, (page 2, paragraph 8, also see Fig. 7); the selected information provided to the sender including identification information (310) that is different than that of the border device, (page 2, paragraph 8, and Fig. 3).

10. In considering claim 12, Lamberton teaches the border device responding to information queries for a plurality of recipients. See page 5, paragraph 37.

11. In considering claim 21, Lamberton teaches the border device being a router. See page 5, paragraph 37.

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 3, 4, 8, 9, 19, 20, are rejected under 35 U.S.C. 103(a) as being unpatentable over Lamberton in view of Vange et al. (hereinafter Vange), U.S. Patent Pub. No. 2002/0002686.

14. In considering claims 3 and 8, although the disclosed method of Lamberton shows substantial features of the claimed invention, it fails to expressly disclose:

- a) The sender having a cache for storing at least a portion of the selected information.

Nevertheless, caches were well known in the art at the time of the present invention. In a similar field of endeavor, Vange teaches a method for overcoming denial of service attacks that includes:

- a) Using a cache to store IP address mapping information at client (117),
(page 5, paragraph 54).

Thus it would have been obvious to one of ordinary skill in the art to modify the teachings of Lamberton to show the sender having a cache for storing at least a portion of the selected information sent from the border device to the sender at the sender when a destination address of the information query corresponds to a predetermined group of addresses stored at the sender, and utilizing the stored selected information from the response whenever an information query is generated including any of the predetermined group of addresses stored at the sender. This would have facilitated communication between the sender and a recipient in the network by reducing the steps

normally required for the sender to access the recipient in the network, Vange, page 5, paragraph 54.

15. In considering claims 4 and 9, it is implicit in the teachings of Vange that the stored selected information in the cache will be deleted after a predetermined period of time. See page 5, paragraph 54. One of ordinary skill in the art would combine the teachings of Lamberton with Vange, for the reasons indicated in consideration of claims 3 and 8.

16. In considering claim 19, Lamberton teaches a method of gathering information about a connection between a sender and a recipient in a network comprising the steps of:

- a) Generating an information query by the sender, sending the information query to the recipient (730), receiving the information query at a border device (720) of the recipient, processing the information query at the border device according to a plurality of predetermined rules, wherein the predetermined rules provide for one of: providing selected information requested by the information query in a response to be sent to the sender; discarding the information query; and passing the information query through the border device to the recipient for response, (page 2, paragraph 8, also see Fig. 7).

Although the disclosed method of Lamberton shows substantial features of the claimed invention, it fails to expressly disclose:

- a) The sender having a cache for storing at least a portion of the selected information.

Nevertheless, caches were well known in the art at the time of the present invention. In a similar field of endeavor, Vange teaches a method for overcoming denial of service attacks that includes:

- a) Using a cache to store IP address mapping information at client (117),
(page 5, paragraph 54).

Thus it would have been obvious to one of ordinary skill in the art to modify the teachings of Lamberton to show the sender having a cache for storing at least a portion of the selected information sent from the border device to the sender, at the sender, for a predetermined period of time when a destination address of the information query corresponds to a predetermined group of addresses stored at the sender, and utilizing the stored selected information from the response whenever an information query is generated including any of the predetermined group of addresses stored at the sender. This would have facilitated communication between the sender and a recipient in the network by reducing the steps normally required for the sender to access the recipient in the network, Vange, page 5, paragraph 54.

17. In considering claim 20, although the disclosed method of Lamberton shows substantial features of the claimed invention, it fails to expressly disclose:

- a) The predetermined addresses being Classless Inter-Domain Routing (CIDR) addresses.

Nevertheless, having the predetermined addresses belong to a group of CIDR addresses is a field of use limitation and not patentable distinction. Also CIDR addressing was well known in the art at the time of the present invention. Furthermore, in a similar field of endeavor, Vange teaches a method for overcoming denial of service attacks that includes:

- a) Resolving requested domain names in a conventional manner, (page 5, paragraph 55).

Thus it would have been obvious to one of ordinary skill in the art to modify the teachings of Lamberton to show the plurality of predetermined addresses belonging to a group of CIDR addresses. This would have provided a well-known method for using Internet address space more efficiently by allowing the assignment of IP addresses in multiple contiguous blocks.

18. Claims 6, 13-15, are rejected under 35 U.S.C. 103(a) as being unpatentable over Lamberton in view of Applicants Admitted Prior Art (AAPA).

19. In considering claims 6 and 15, although the disclosed method of Lamberton shows substantial features of the claimed invention, it fails to expressly disclose: discarding the information query, when the query is too large.

Nevertheless, the discarding of an information query when the query is too large is a field of use limitation and not patentable distinction. Furthermore, the applicant admits that it was well known in the art to discard information queries for various reasons. See page 7, lines 1-5.

Thus it would have been obvious to one of ordinary skill in the art to modify the teachings of Lamberton to show one of the plurality of predetermined rules providing for discarding the information query when the information query is of a size larger than a predetermined range of allowable sizes. This would have provided a well-known means for discarding information queries that appear to be malicious, thereby, providing an efficient means for detecting attackers and blocking communication between the attacker and a receiver.

20. In considering claim 13, Lamberton teaches a method of gathering information regarding a connection between a sender and a recipient in a network comprising the steps of:

- a) Generating a packet by the sender, sending the packet to the recipient (730), receiving the packet at a border device (720) of the recipient, and processing the packet at the border device according to a plurality of predetermined rules, wherein the predetermined rules provide for one of: generating a response packet to be sent to the sender; discarding the packet; and passing the packet through the border device to the recipient for response, (page 2, paragraph 8, also see Fig. 7).

Although the disclosed method of Lamberton shows substantial features of the claimed invention, it fails to expressly disclose:

- a) The packet being a performance measurement packet.

Nevertheless, performance measurement packets were well known in the art at the time of the present invention. The applicant admits this in the first two paragraphs under the section titled **Description of Related Art**. See AAPA pages 1 and 2.

Thus, it would have been obvious to one of ordinary skill in the art to modify the teachings of Lamberton to show the packet being a performance measurement packet. This would have enhanced the teachings of Lamberton to provide a useful tool for testing the performance between two or more hosts on the Internet, such as in cases where the closest server is determined to be used in a load balancing system, AAPA page 2, paragraph 2.

21. In considering claim 14, Lamberton teaches the predetermined rules generating a response packet, the response including identification information (310) that is different than that of the border device. See page 2, paragraph 8, and Fig. 3.

22. Claim 7, is rejected under 35 U.S.C. 103(a) as being unpatentable over Lamberton in view of Templin et al. (hereinafter Templin), U.S. Patent 5,781,550 (supplied by applicant).

23. In considering claims 7, although the disclosed method of Lamberton shows substantial features of the claimed invention, it fails to expressly disclose:

- a) The information query including predetermined identification information.

Nevertheless, information queries including predetermined identification information were well known in the art at the time of the present invention. In a similar field of endeavor, Templin teaches this in his discussion of the prior art. More specifically, Templin teaches:

- a) Passing an information query through a border unit when the information query includes predetermined information, (col. 2, lines 22-29).

Thus it would have been obvious to one of ordinary skill in the art to modify the teachings of Lamberton to show one rule of the plurality of predetermined rules providing for passing the information query through the border unit to the recipient for response when the information query includes predetermined identification information. This would have facilitated communication between the sender and a recipient in the network by instantly passing the information query through the border unit when the information query includes predetermined identification information, thereby, reducing the steps normally required for the sender to access the recipient in the network.

24. Claim 16, is rejected under 35 U.S.C. 103(a) as being unpatentable over Lamberton in view of AAPA, and further in view of Templin.

25. In considering claim 16, although the disclosed method of Lamberton shows substantial features of the claimed invention, it fails to expressly disclose:

- a) The information query including predetermined identification information.

Nevertheless, information queries including predetermined identification information were well known in the art at the time of the present invention. In a similar field of endeavor, Templin teaches this in his discussion of the prior art. More specifically, Templin teaches:

- a) Passing an information query through a border unit when the information query includes predetermined information, (col. 2, lines 22-29).

Thus it would have been obvious to one of ordinary skill in the art to modify the teachings of Lamberton to show one rule of the plurality of predetermined rules providing for passing the information query through the border unit to the recipient for response when the information query includes predetermined identification information. This would have facilitated communication between the sender and a recipient in the network by instantly passing the information query through the border unit when the information query includes predetermined identification information, thereby, reducing the steps normally required for the sender to access the recipient in the network.

26. Claims 17, 18, are rejected under 35 U.S.C. 103(a) as being unpatentable over Lamberton in view of AAPA, and further in view of Vange.

27. In considering claim 17, although the disclosed method of Lamberton shows substantial features of the claimed invention, it fails to expressly disclose:

- a) The sender having a cache for storing at least a portion of the selected information.

Nevertheless, caches were well known in the art at the time of the present invention. In a similar field of endeavor, Vange teaches a method for overcoming denial of service attacks that includes:

- a) Using a cache to store IP address mapping information at client (117),
(page 5, paragraph 54).

Thus it would have been obvious to one of ordinary skill in the art to modify the teachings of Lamberton to show the sender having a cache for storing at least the performance metric information sent from the border device to the sender at the sender when a destination address of performance measurement packet corresponds to one of a plurality of predetermined addresses stored at the sender, and utilizing the stored performance metric information from the response whenever performance measurement packet is generated including any of the predetermined group of addresses stored at the sender. This would have facilitated communication between the sender and a recipient in the network by reducing the steps normally required for the sender to access the recipient in the network, Vange, page 5, paragraph 54.

28. In considering claim 18, it is implicit in the teachings of Vange that the stored performance measurement information in the cache will be deleted after a

predetermined period of time. See page 5, paragraph 54. One of ordinary skill in the art would combine the teachings of Lamberton with Vange, for the reasons indicated in consideration of claim 17.

Conclusion

29. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

30. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hassan Phillips whose telephone number is (571) 272-3940. The examiner can normally be reached on M-F 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung can be reached on (571) 272-3939. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HP/
2/18/05


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